

# Kauai's First Documented Green Sea Turtle Nest of 2016 Hatches

## Sixty-three Hatchlings Emerge from Pacific Missile Range Facility

**PACIFIC MISSILE RANGE** Facility's (PMRF) lone 2016 green sea turtle nest, located a quarter-mile south of Shenanigan's All Hands Club, hatched on the evening of July 19, 2016.

PMRF Security found the nest on May 25 during one of their regular beach surveys and reported the incident to PMRF Wildlife

Technician Rachel Herring. Herring then worked with Jason Shimauchi from the U.S. Department of Agriculture Wildlife Services to fence the nest to protect it from pedestrian and vehicle traffic. The nest hatched at 57 days, just shy of the 60-day average seen in Hawaii.

Tracks were discovered leading from the nest to the ocean on July 20, and at least two more distinct fresh sets of tracks were identified on the morning of July 21, indicating late hatchlings. PMRF Wildlife Technician Rebecca Johnson worked

with state biologist Don Heacock to excavate the nest on July 23. Biologists do this for two reasons—turtle hatchlings can remain trapped underground, unable to dig to the surface; and biologists can collect information on the nest by counting egg shells, thereby determining the number of hatchlings released from

the nest, or collecting unhatched eggs to perform DNA analysis and link the nest to a certain female in the population.

Upon excavation, Heacock and Johnson found no hatchlings, 63 egg shells, and only one unhatched egg beneath the sand. With a total clutch



Green sea turtle hatchlings act on pure instinct to dig their way out of the nest and swim out to sea where they will spend the next 25–35 years before returning to shore to nest themselves.

*John Nelson*

size of 64 and 98 percent hatching success, this was a small but extremely successful nest. Heacock stated that this nest was likely laid by a young, smaller green sea turtle (*Chelonia mydas*) judging by egg color and size, as well as clutch size.

According to the National Oceanic and Atmospheric Administration's website, green sea turtles are thought to live 60–70 years, reaching sexual maturity at 25–35 years. Females will generally reproduce every two to three years at that point, and lay three to six clutches in a season. On average, one hundred eggs are deposited in each nest.

The Hawaiian green sea turtle is a threatened distinct population segment protected under the Endangered Species Act, the majority of the population (approximately 90 percent) nesting in the Northwest Hawaiian Islands on the beaches of French Frigate Shoals. Most threatening to Hawaii's population, besides limited nesting area, is the disease Fibropapillomatosis, which produces tumors on soft body parts of the turtles. While these tumors are not themselves harmful, they can obstruct movement or hinder turtles' ability to see and feed.

Turtles are frequently seen basking at PMRF at "Turtle Cove," the outpouring of Nohili Ditch on the north side of the base, and can occasionally be seen at other areas on base as well. PMRF is an attractive location for nesting turtles with its expansive miles of relatively intact, sandy beach. As noted by Heacock, PMRF is also ideal in terms of its relatively low vehicle traffic and lack of nighttime activity on the beach. In 2015, seven nests produced a total of 468 sea turtle hatchlings.

The naval base works closely with federal and state agencies, schools, conservation organizations, the public, and the host community to implement groundbreaking

initiatives towards conservation, environmental protection, and the protection of threatened and endangered species.

PMRF is the recipient of the 2015 Chief of Naval Operations Environmental Award as well as the 2015 Secretary of the Navy Environmental Award for its achievements in environmental stewardship. [!\[\]\(a870788d6ed9b8fd294b7654a8c8526b\_img.jpg\)](#)

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State Biologist Don Heacock excavates nest, collecting data on the nest as well as looking for trapped hatchlings.  
*Rebecca Johnson*



Biologists collected 63 egg shells and one unhatched amniote from the nest cavity—these and the tracks are all that remain.  
*Rebecca Johnson*